

MaxProof® 470

Cement-based waterproofing coat

Description

MaxProof 470 is a single component cement-based, durable, waterproofing coat for concrete, masonry and cement-based substrates.

Features and benefits

- High bond strength, becomes an integral part of the substrate.
- Penetrate through the concrete substrates and blocks the pores of concrete substrates.
- Resists positive and negative water pressure.
- Water vapor permeable.
- Resist occasional foot traffic.
- Non-toxic, suitable for potable water uses as well as domestic and waste water uses.
- Can be applied to damp substrates.

Recommended for

MaxProof 470 can be used for internal and external waterproofing applications, above and below ground level. The main application areas include:

- Wet areas such as showers, bathrooms, toilets, kitchens and balconies.
- Swimming pools and water tanks.
- Basements, foundations & retaining walls.
- Bridges decks and tunnels.
- Protection of reinforced concrete elements against carbonation and chloride attack.

Composition

MaxProof 470 is blend of high strength Portland cement, well-graded sands and additives to enhance workability, water-repellency and adhesion.

Packaging

MaxProof 470 is available in 25 kg bag.

Coverage

Damp-proofing: 1.8 kg/m² (one coat only).

Waterproofing: 2.25 kg/m²/two coats.

Note:

Coverage rate takes no account of wastage and may vary according to surface condition and application method.

Technical data

Wet density	1.85 kg/liter
Resistant to water pressure	2 bar
Compressive strength	>45 N/mm ²
Tensile strength	>3.5 N/mm ²
Bond strength	>2.0 N/mm ²
Flexural strength	>7.5 N/mm ²
Pot life	45 minutes at 20°C.
Time between coats	6 hours minimum @ 20°C
Colors	Grey - white

Surface preparation

Substrates to be waterproofed should be sound and free from dust, laitance, paints, curing compound or any other contaminates. Concrete substrates should be left to cure for 14 days. Mechanical surface preparation is recommended. This is best obtained by using high pressure water or light grit blasting. Then, surface must be thoroughly washed with clean potable water to remove all dust and loose particles. Static cracks and surface defects must be cut and filled with suitable repair mortar or site mix sand / cement mortar modified with **UniBond LX**. Ensure that all cavities in the substrate are filled. Surface should be roughened and open-pored to ensure good mechanical adhesion of **MaxProof 470**. Wall to floor intersection, if any, should be cut 20 X 20 mm along the junction and filled with sand / cement mortar modified with **UniBond LX** and round out to 40 mm minimum radius.

Mixing

ACC Construction Chemicals, L.L.C.

Headquarters & factory: Plot (8), Block (32), 2nd. Industrial Zone, Borg Al Arab City, Egypt.

Tel./fax: 035226004 – Customer service: 01288593311 – email: contact@acc.com.eg

	Slurry consistency	Trowelable consistency
MaxProof 470	25 kg	25 kg
UniBond LX	1.25 liters	1.25 liters
Water	5±0.5 kg	4.5±0.5 kg

- If **MaxProof 470** is expected to be in contact with hydrocarbons (such as diesel oil, petrol, etc.), potable water only should be used as mixing liquid. In this case a maximum of 5.1 liters per 20 kg of powder may be used (for slurry consistency).
- Partial small amounts may be mixed manually using suitable hand tools.
- Add the mixing liquid into clean container, and then add the **MaxProof 470** while mixing using slow speed drill fitted with suitable mixing paddle.
- Mix until a thick consistency is achieved.
- Leave **MaxProof 470** to stand for 5 minutes. Re-mix again adding a small quantity of mixing liquid for 2 minutes to restore the consistency.
- MIX AND USE. Mix material that can be applied within 45 minutes (pot life).

Application

Always apply **MaxProof 470** using stiff brush to a prepared damp substrate. High-suction substrates require more dampening than dense substrates. Completely dampen down the substrate with water prior to **MaxProof 470** application. Do not saturate the substrate but keep it cool and damp throughout the application.

Ensure that there is no free-standing water at the time of application.

First coat

Work the first coat uniformly into the substrate to completely fill and cover all voids, holes and static cracks. Do not spread the material too thin. Brush it well into the surface and finish it

in one direction for neat appearance. Leave the first coat to dry overnight before applying the second coat.

Second coat

Dampen the first coat and remove excess moisture prior to applying the second coat. Apply the second coat exactly as mentioned above onto the first coat and finish it in one direction preferably in the opposite direction to the previous coat.

Curing

In hot weather or excessive drying conditions, fog-spray after initial set has taken place.

In cold weather or unventilated areas, it may be necessary to leave the application for a longer curing period. Never use curing compounds or de-humidifiers.

Finishing

In case that paints will be applied on top of **MaxProof 470**, it should be left to cure for at least 7 days.

Do not use solvent base paints. Do not paint on top of **MaxProof 470** if it is subjected to negative water pressure.

Where sand-cement plaster finish is required, it is essential to apply a rough coat (spatter dash coat) of sand / cement mortar modified with **UniBond LX** onto the final coat of **MaxProof 470** while it is still tacky.

In areas where ceramic tiles will be installed on top of **MaxProof 470**, use **UniFix 303** or **UniFix 308**.

Important notes

The quantity of mixing liquid may vary slightly depending on mixing method and weather conditions.

If the consistency is right, it will just support the weight of the stiff brush. If the consistency is too thick, the material will drag. If it is too thin, the applied material will not hide the substrate. The maximum application thickness is 2 mm/coat.

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In areas of excessive water pressure, increase the overall coverage to 3.6 kg/m² for two coats application.

If spray application should take place, spray through a 3 - 4 mm nozzle at 3 - 5 bar pressure. Apply the first layer in circular motion with the spray nozzle. Keep the nozzle at 90° angle to the substrate.

Apply the second coat while the first coat is still damp but firm.

The final layer can be left as a spray finish or treated to achieve the required finish.

Setting time/strength may be accelerated at higher temperatures or retarded at lower temperatures.

Do not apply **MaxProof 470** in direct sunlight or if the ambient temperature is below 5°C. When rain is anticipated within 24 hours after application, the surface should be protected.

For underground structures, backfilling can be carried out 3 days after completion of the **MaxProof 470** treatment.

Condensation may occur after waterproofing basement areas. This can be reduced by increasing ventilation.

If **MaxProof 470** is used to waterproof potable water tank or swimming pool, it should be washed down after the curing is completed with a saline solution (salt brine), 12.5% of salts in water, and thoroughly rinsed with clean water.

This process should be repeated until the required pH. conditions are obtained. Filling water retaining structures with water can take place usually not less than 14 days after application.

If earlier filling is required, filling may be considered after not less than 7 days ensuring that the surface is thoroughly checked for hardness.

Cleaning

Clean tools with water immediately after use. Hardened materials should be cleaned mechanically.

Storage and shelf life

To maintain its quality and suitability for use, the product should be stored in its unopened packaging, off the ground on pallets or similar structures, in a cool and dry environment. When stored under these recommended conditions, the product remains suitable for use for 12 months from the manufacturing date stated on the packaging.

Health and Safety

This product contains cement which may cause skin irritation. It may cause allergic skin reaction and eye damage. Avoid breathing dust. Wear protective gloves, eye goggles and clothing. In case of skin contact, wash with plenty of water. In case of eye contact, rinse continuously with water for several minutes and seek medical attention. Dispose excess material to special waste collection point in accordance with local & national regulation. Keep out of reach of children.

For further information, please ask for Safety Data Sheet for this product.

The most up-to-date TDS can be obtained from ACC Customer Service Department, or downloaded from our website: www.acc.com.eg.

More from ACC

A wide range of construction chemicals, specialty mortars and specialized building materials are manufactured by ACC which include:

- Waterproofing.
- Flooring.
- Tile Adhesives & Grouts.
- Concrete Repair.
- Non-Shrink Grouts.
- Bonding Agents.
- Exterior Façade Coatings.
- Premixed Fairing Coats, Renders & Mortars.
- Putties (stucco).
- Sealers & Emulsion Paints.